Response to Final Office Action mailed 10/31/2007   Appl. No.: 10/708,552
Amendment Dated: December 24 2007   Atty. Docket No.: TI-36044

Listing of Claims

Claim 1 (Currently Amended): A method of receiving a packet containing a plurality of data symbols, said method being performed in a receiver connected to a plurality of antennas containing a first antenna and a second antenna, said method comprising:

generating a corresponding plurality of parameters by examining a respective signal portion received on each of said plurality of antennas, wherein said signal portion corresponds to a non-payload portion of said packet, said corresponding plurality of parameters comprising a first plurality of parameters and a second plurality of parameters respectively corresponding to said first antenna and said second antenna;

selecting one of said plurality of antennas based on said corresponding plurality of parameters; and

receiving a payload portion of said packet on said one of said plurality of antennas,

wherein each of said parameters has a corresponding value for each of a plurality of sub-portions of the respective signal portion received on each of said plurality of antennas,

wherein a first parameter contained in each of said corresponding plurality of parameters comprises a correlation value, and a second parameter contained in each of said corresponding plurality of parameters comprises a strength of said signal, said correlation value representing the similarity of said signal portion with a corresponding expected signal according to a pre-defined protocol,

wherein said generating comprises determining a gain factor necessary to amplify said signal portion to a first voltage level, wherein said strength is determined based on said gain factor,

wherein said plurality of antennas comprise only said first antenna and said second antenna, wherein said gain factor for said first antenna and said second antenna is respectively represented by AGC1 and AGC2 on a dB scale, wherein T1 and T2 represent a first threshold and a second threshold,

if a difference in said AGC1 and said AGC2 values is large compared to T1, selecting the antenna having a lower value of said AGC1 and said AGC2;

if the absolute value of said difference between AGC1 and AGC2 values is small, selecting one of said first antenna and said second antenna having a value close to $\mu\infty$ if the